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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,370	07/31/2003	Stuart S. Kreitzer	7463-15	2130

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EXAMINER	
KLIMACH, PAULA W	
ART UNIT	**PAPER NUMBER**
2135	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/631,370	KREITZER, STUART S.	
	Examiner	Art Unit	
	Paula W. Klimach	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 14-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 05/23/05. Applicant cancelled Claims 13, and amended Claims 1-2, 5-6, 11, 14, 17, and 21. The amendment filed on 05/23/05 have been entered and made of record. Therefore, presently pending claims are 1-12 and 14-21.

Response to Arguments

Applicant's arguments filed 05/23/05 have been fully considered but they are not persuasive because of following reasons.

Applicant argued that claim 1 is amended to claim different types of communication where types of communications mean GSM to CDMA. This is not found persuasive. The examiner wishes to disagree. The definition of type is a number of things having in common traits or characteristics that distinguish them as a class. Therefore switching the type of communication can switch from a type that uses frequency A to a type that uses frequency B. Applicants clearly have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that Suzuki does teach or suggest the subject matter broadly recited in independent Claims 1, 11, 14, and 21. Dependent Claims 2-10, 11-12, 15-20, and 22-21 are also

rejected at least by virtue of their dependency on independent claims and by other reason set forth in this office action. Accordingly, rejections for claims 1-12 and 14-21 are respectfully maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 8, 14, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (5,390,252).

In reference to claims 1 and 14, Suzuki discloses a system and method of establishing secure communications in a multi-mode portable communication device, comprising the steps of: establishing a symmetric traffic key between the multi-mode portable communication device and a second portable communication device in a first type of communication (Fig. 3); switching to at least a second type of communication (column 5 lines 38-45); and sharing the symmetric traffic key between the multi-mode portable communication device and the second portable communication device (column 5 line 60 to column 6 line 12).

In reference to claim 7, Suzuki discloses a system and method wherein the step of storing the symmetric traffic key in a phonebook record associated with the second portable communication device (column 7 lines 31-37).

In reference to claims 8 and 18, Suzuki discloses a system wherein the step of storing a predetermined number of symmetric traffic keys in a cache memory associated with a

predetermined number of other portable communication devices in recent communication with the multi-mode portable communication device (column 7 lines 31-37).

In reference to claims 10 and 20, Suzuki establishes a key exchange with a plurality of other predetermine portable communication devices during a background mode (Fig. 16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3, 9, 11, 15, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Schneier.

In reference to claims 2 and 15, Although Suzuki discloses encrypting the communication between the mobile portable station and the current base station (device that communicates with the portable station), Suzuki does not expressly disclose a system that uses Automatic Public Key Exchange techniques.

Schneier teaches using the public key exchange system using private keys along with a public key of a peer unit before commencing secure communications (page 48).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the public and private keys to perform the key exchange as in Schneier in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this because it would make key-exchange easier.

In reference to claim 3, although Suzuki discloses encrypting the communication between the mobile portable station and the current base station (device that communicates with the portable station), Suzuki does not expressly disclose a system that uses Automatic Public Key Exchange is implemented using public-key algorithms such as Diffie-Hellman cryptography or Elliptic Curve Cryptography.

Schneier discloses a system that uses public-key algorithms for Public Key Exchange techniques (page 48 paragraph 2).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the public and private keys to perform the key exchange as in Schneier in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this because it would make key-exchange easier.

In reference to claims 9 and 19, Suzuki discloses a system wherein the step of establishing a new communication session between the multi-mode portable communication device and the second portable communication device without requiring a new key establishment process (column 3 lines 30-40).

However, Suzuki does not expressly disclose a system that uses Automatic Public Key Exchange techniques.

Schneier teaches using the public key exchange system using private keys along with a public key of a peer unit before commencing secure communications (page 48).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the public and private keys to perform the key exchange as in Schneier in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this

because it would make key-exchange easier.

In reference to claims 11 and 21, Suzuki discloses a method and system of establishing secure communications among a plurality of portable communication devices, comprising the steps of: storing information associated with a predetermined number of other portable communication devices (column 7 lines 31-37); establishing a symmetric traffic key between a first portable communication device and the predetermined number of other portable communication devices during a background mode of the first portable communication device (column 5 line 60 to column 6 line 12); and establishing a secure communication session in a first type of communication between the first portable communication and at least one among the predetermined number of other portable (Fig 16); switching to at least a second type of communication (column 5 lines 38-45); and sharing the symmetric traffic key between the multi-mode portable communication device and the second portable communication device (column 5 line 60 to column 6 line 12).. Although Suzuki discloses encrypting the communication between the mobile portable station and the current base station (device that communicates with the portable station), Suzuki does not expressly disclose a system that uses Automatic Public Key Exchange is implemented using public-key algorithms such as Diffie-Hellman cryptography or Elliptic Curve Cryptography.

Schneier discloses a system that uses public-key algorithms for Public Key Exchange techniques (page 48 paragraph 2).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the public and private keys to perform the key exchange as in Schneier in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this

because it would make key-exchange easier.

In reference to claim 12, Suzuki discloses a system wherein the step of establishing a symmetric traffic key comprises contacting the predetermined number of other portable communication devices to determine if their respective keys have expired and performing a background exchange to re-establish a fresh key if the respective key has expired (column 6 lines 55-65).

Claims 4-5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki and Schneier as applied to claim 3 above, and further in view of the article by L-3 Communications.

In reference to claims 4 and 16, although Suzuki discloses encrypting the communication between the mobile portable station and the current base station (device that communicates with the portable station), Suzuki does not expressly disclose a system that uses Automatic Public Key Exchange techniques. Suzuki does not expressly disclose a system wherein the Automatic Public Key exchange is implement by combining public-key algorithms with a signaling scheme such as Future Narrow Band Digital Terminal protocol.

L-3 discloses a terminal that implements the Future Narrow Digital standard and therefore protocol. The protocol includes key management and therefore key exchange (page 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the future narrow band with digital terminal protocol as disclosed by L-3 in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this

because Future Narrow Band Digital Terminal Protocol does not tie one down to a specific network, but instead assures operation over a variety of narrow band wide band (L-3 page 1).

In reference to claim 5, although Suzuki discloses the switching from one mode to the second mode (column 5 lines 38-55), Suzuki does not disclose the modes comprising interconnect voice, dispatch voice, peer-to peer data, and peer to peer voice

L-3 teaches that FNDT standard defines several modes of operation.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement several modes of operation disclosed by L-3 in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this because vendors are permitted by the FNBDT to incorporate their own enhancements therefore products can meet a set of general requirements (L-3 page 1).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 1 above, and further in view of the FNBDT Signaling Plan.

In reference to claim 6, Suzuki does not disclose a system wherein the step of switching to the second mode from the first mode comprises switching among modes comprising CDMA, TDMA, GSM, and WLAN.

The FNBDT Signaling Plan discloses a system wherein the channels used in the operational mode include digital cellular system.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the future narrow band with digital terminal protocol as disclosed by L-3 in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this

because Future Narrow Band Digital Terminal Protocol does not tie one down to a specific network, but instead assures operation over a variety of narrow band wide band.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 14 above, and further in view of the FNBDT Signaling Plan and L-3 communications.

In reference to claim 17, although Suzuki discloses the switching from one type to the second type of communication (column 5 lines 38-55), Suzuki does not disclose the modes comprising interconnect voice, dispatch voice, peer-to peer data, and peer to peer voice

L-3 teaches that FNDT standard defines several modes of operation.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement several modes of operation disclosed by L-3 in the system of Suzuki. One of ordinary skill in the art would have been motivated to do this because vendors are permitted by the FNBDT to incorporate their own enhancements therefore products can meet a set of general requirements (L-3 page 1).

Suzuki does not disclose a system wherein the step of switching to the second mode from the first mode comprises switching among modes comprising CDMA, TDMA, GSM, and WLAN.

The FNBDT Signaling Plan discloses a system wherein the channels used in the operational mode include digital cellular system.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the future narrow band with digital terminal protocol as disclosed by L-3 in

the system of Suzuki. One of ordinary skill in the art would have been motivated to do this because Future Narrow Band Digital Terminal Protocol does not tie one down to a specific network, but instead assures operation over a variety of narrow band wide band.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-38544. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK
Friday, August 19, 2005

Primary Examiner
Art Unit 2135